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MAR 1 1965

CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
IDAHO

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
IDAHO STATE RECLAMATION ENGINEER

Data included in this report were obtained by the agency named above in cooperation with the Comptroller of Water Rights of British Columbia, and Federal, State and private organizations listed on the last page of this report.

AS OF
FEB. 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES _____	MONTHLY (FEB.-MAY) _____	PORTLAND, OREGON _____	ALL COOPERATORS
BASIC DATA SUMMARY _____	OCTOBER 1 _____	PORTLAND, OREGON _____	ALL COOPERATORS
STATES			
ALASKA _____	MONTHLY (MAR.-MAY) _____	PALMER, ALASKA _____	ALASKA S.C.D.
ARIZONA _____	SEMI-MONTHLY _____ (JAN.15 - APR.1)	PHOENIX, ARIZONA _____	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO _____	MONTHLY (FEB.-MAY) _____	FORT COLLINS, COLORADO _____	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO _____	MONTHLY (JAN.-JUNE) _____	BOISE, IDAHO _____	IDAHO STATE RECLAMATION ENGINEER
MONTANA _____	MONTHLY (JAN.-JUNE) _____	BOZEMAN, MONTANA _____	MONT. AGR. EXP. STATION
NEVADA _____	MONTHLY (JAN.-MAY) _____	RENO, NEVADA _____	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON _____	MONTHLY (JAN.-JUNE) _____	PORTLAND, OREGON _____	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH _____	MONTHLY (JAN.-JUNE) _____	SALT LAKE CITY, UTAH _____	UTAH STATE ENGINEER
WASHINGTON _____	MONTHLY (FEB.-JUNE) _____	SPOKANE, WASHINGTON _____	WN. STATE DEPT. OF CONSERVATION
WYOMING _____	MONTHLY (FEB.-JUNE) _____	CASPER, WYOMING _____	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA _____	MONTHLY (FEB.-JUNE) _____	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA _____	MONTHLY (FEB.-MAY) _____	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
IDAHO

Report prepared by

MORLAN W. NELSON Snow Survey Supervisor

and

J. ALDEN WILSON Asst. Snow Survey Supervisor

SOIL CONSERVATION SERVICE
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Issued by

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BOISE, IDAHO

WATER SUPPLY OUTLOOK for IDAHO



GENERAL SUMMARY FOR FEBRUARY 1, 1965

In the fall of 1964, heavy rains and early snowfall occurred throughout the southern half of Idaho. The pattern and intensity of storms has continued through to the first of February. The fall rains and snow melt that occurred at high elevations during the latter part of December has created runoff channels and soil moisture conditions that will allow speedy and almost total runoff of melting snow or future rainfall. The valley and foothill elevation snow cover is unusually heavy and is underlain by saturated soils on many rivers.

The snowfall in the mountainous areas of southern Idaho has broken records on many courses as of February 1. The amount of water in the snow is unusually high because rainfall occurred at elevations up to over 10,000 feet. Some of this rain came in the form of sleet and has remained as an ice layer in the snow pack. The density of the snow, because of the warm temperatures and rainfall is similar to March or April measurements. On practically all courses, the snow at the surface is so hard that one can walk over it without skis.

In northern Idaho and Canada, the snow pack is only slightly above normal, and snowfall in general has not been as intense as in the southern half of the state.

Only once in a fifty to one hundred year period does a combination of natural phenomena produce such a tremendous volume of water in storage on our watersheds. The volumes represented in the snow pack on our mountains at this time are so heavy that the warmest and driest spring of experience would produce damaging volumes of water on many rivers. A continuation of the storm patterns that have been established so far this year would pose problems never before experienced in Idaho. The snowfall in the next two months is the key to the degree of damage that can result from the natural phenomena that has occurred this season.

Forecast factors which include an evaluation of snowfall to date, soil moisture conditions, and expected precipitation for the remaining of the season indicate record-breaking streamflow is in prospect for this spring.

The low elevation snow pack apparent throughout the state is technically highly undesirable because the first few warm days, whenever they occur, will result in heavy streamflow at that time. This runoff will be followed by even heavier flows coming from melting snow in the higher elevations which will extend well into the summer. The river basins which already have critically high snow cover are: The Little and Big Lost Rivers, the Big and Little Wood Rivers and the Boise River.

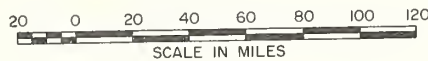
Special measurements are being planned during the middle of February and March to follow any change that may occur in the snow pack. Normally two-thirds of the snow cover has accumulated by February 1. This year, however, many snow courses have far more than the total year's average accumulation already.

SNOW WATER DEPTHS

As percent of 1948-62 15 year average

FEBRUARY 1, 1965

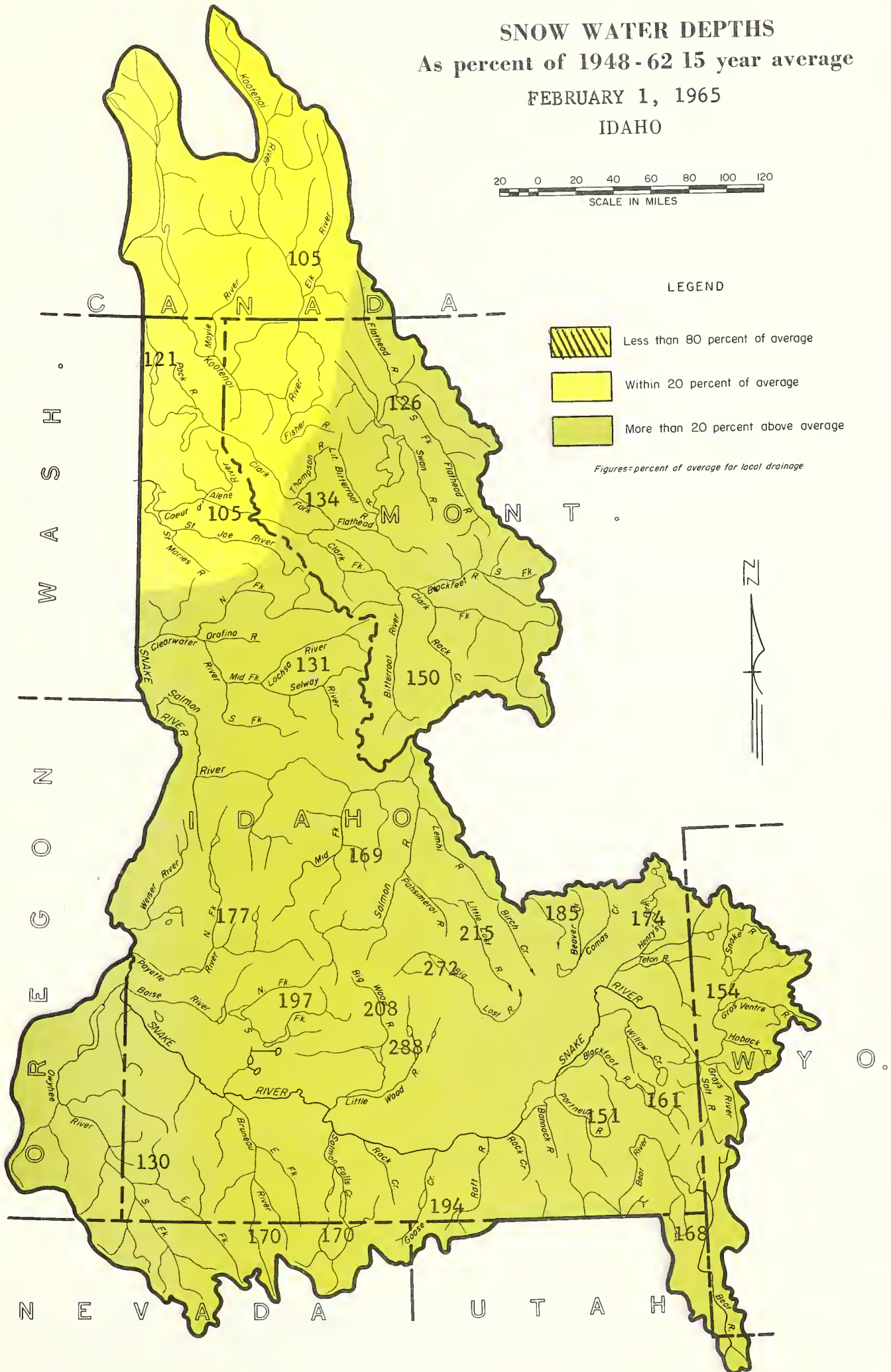
IDAHO



LEGEND

- Less than 80 percent of average
- Within 20 percent of average
- More than 20 percent above average

Figures=percent of average for local drainage



COMPARISON of SNOW COVER

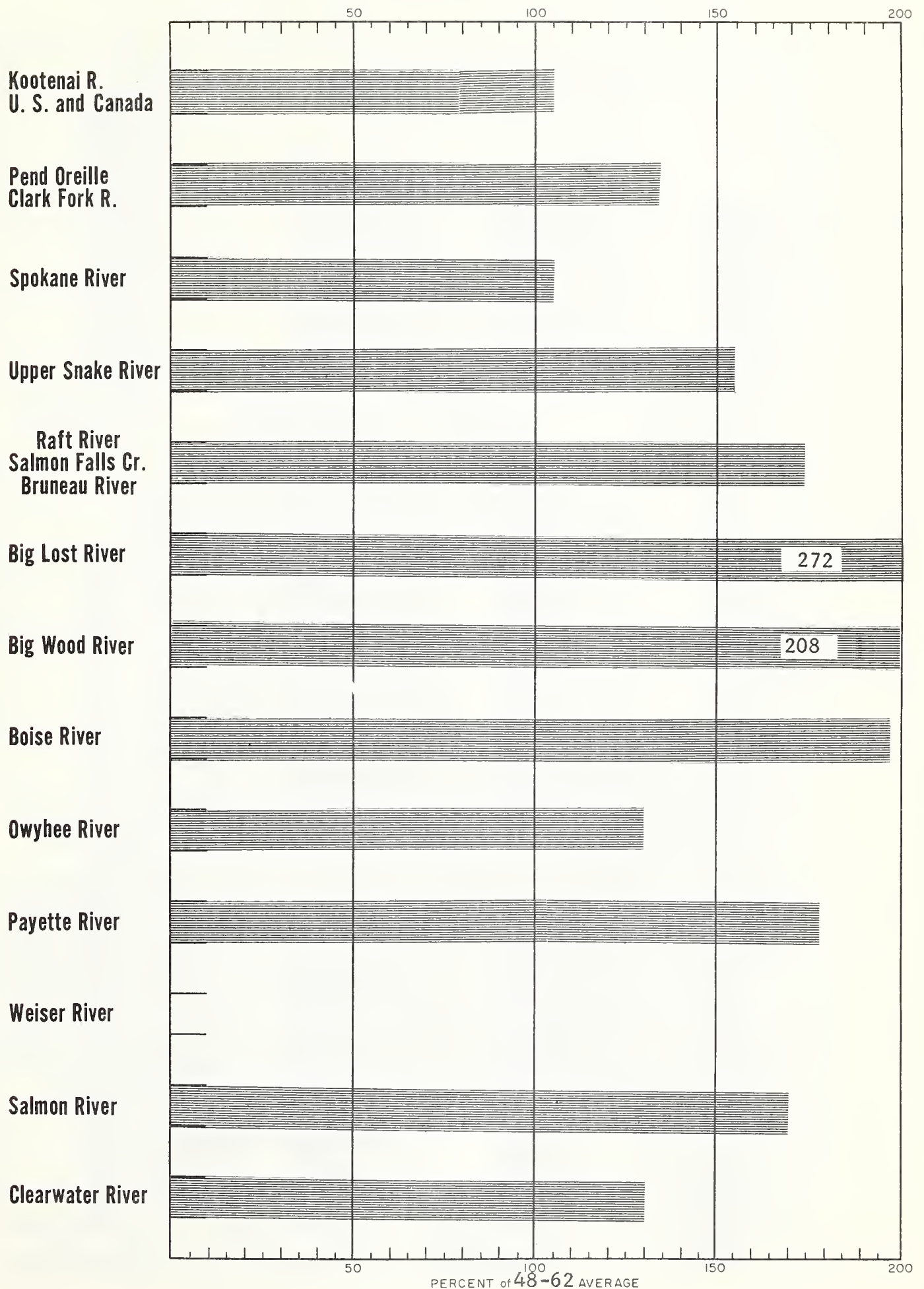
RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1948 - 62 AVERAGE
<u>UPPER COLUMBIA BASIN</u>			
Kootenai River	9	120	105
Flathead River	5	153	126
Clark Fork River	12	133	134
Bitterroot River	2	133	150
Priest River	2-3	113	121
Spokane River	1-6	111	105
<u>SNAKE BASIN</u>			
Mud Lake Drainages	2-4	238	185
Upper Snake River	19	170	154
Henry's Fork River	4	191	174
Teton River	2-4	141	130
Blackfoot River	3	160	161
Portneuf River	3	141	151
Raft River - Goose Creek	2-7	172	194
Salmon Falls Creek	8-10	132	170
Bruneau River	4	154	170
Little Lost River	4-5	173	215
Big Lost River	1-8	211	272
Big Wood River	7	207	208
Little Wood River	3-4	229	288
Boise River	11-19	167	197
Owyhee River - Nevada and Idaho	10-18	99	130
Payette River	10-12	188	177
Weiser River	3	200	--
Salmon River	10-22	204	169
Lemhi River	6	230	--
Clearwater River	6-17	129	131
Palouse River	5	85	126
<u>GREAT BASIN</u>			
Upper Bear River	16	190	168
Montpelier Creek	2	193	--
Mink Creek	4	187	165
Cub River	2	138	136
Malad River	1-2	140	183

SNOW WATER DEPTHS

BY DRAINAGE

Compared To The 1948-62 15 Yr. Average

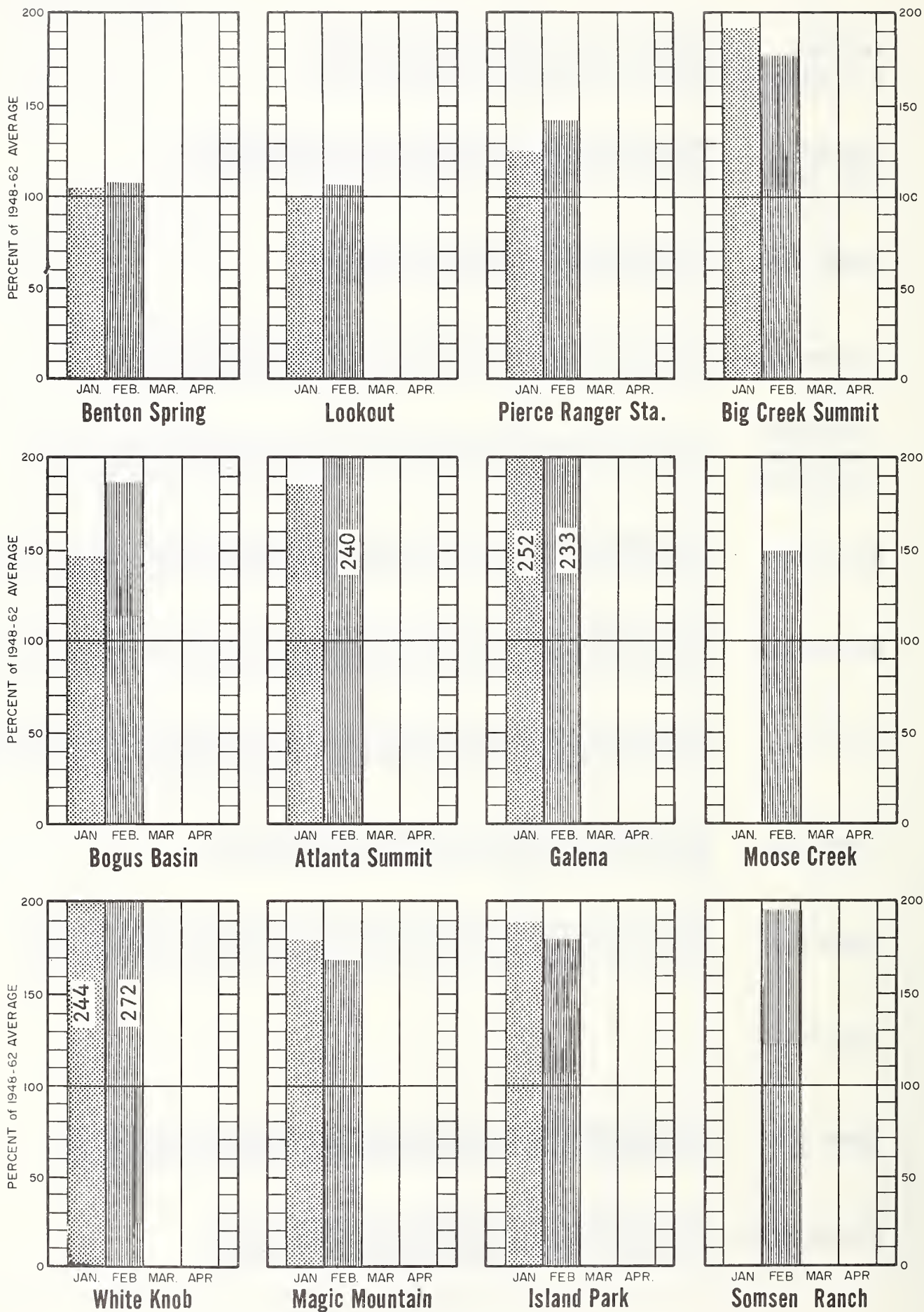
Snow Cover as of Approximately



SNOW WATER DEPTHS ACCUMULATION

For Selected Snow Courses
As Compared To 1948-62 15Yr. Average

FEBRUARY 1, 1965



STREAMFLOW FORECASTS^c (1,000 Ac. Ft.)

STREAM and/or FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	1948-1962 AVERAGE	THIS YEAR AS PERCENT OF AVERAGE
------------------------------	-----------------------	-----------------	-----------	----------------------	---------------------------------------

KOOTENAI RIVER

Leonia (at) 9050 Apr-Sep 8368 9327 97

SPOKANE RIVER

Post Falls 1/ (at) 3900 Apr-Sep 3000 3413 114

SNAKE RIVER

Heise 2/ (nr) 4800 Apr-Sep 3800 3868 124

BIG LOST RIVER

Mackay 3/ (nr) 265 Apr-Sep 180 147 180

BIG WOOD RIVER

Hailey (at) 500 Apr-Sep 275 265 189

BOISE RIVER

Boise 4/ (nr) 2800 Apr-Sep 1650 1632 172

PAYETTE RIVER

Horseshoe Bend 5/ (nr) 2800 Apr-Sep 1970 1988 141

OWYHEE RIVER

Lake Owyhee
net inflow 6/ 620 Apr-Sep -- 381 163

SALMON RIVER

Whitebird (at) 10400 Apr-Sep 7000 6949 150

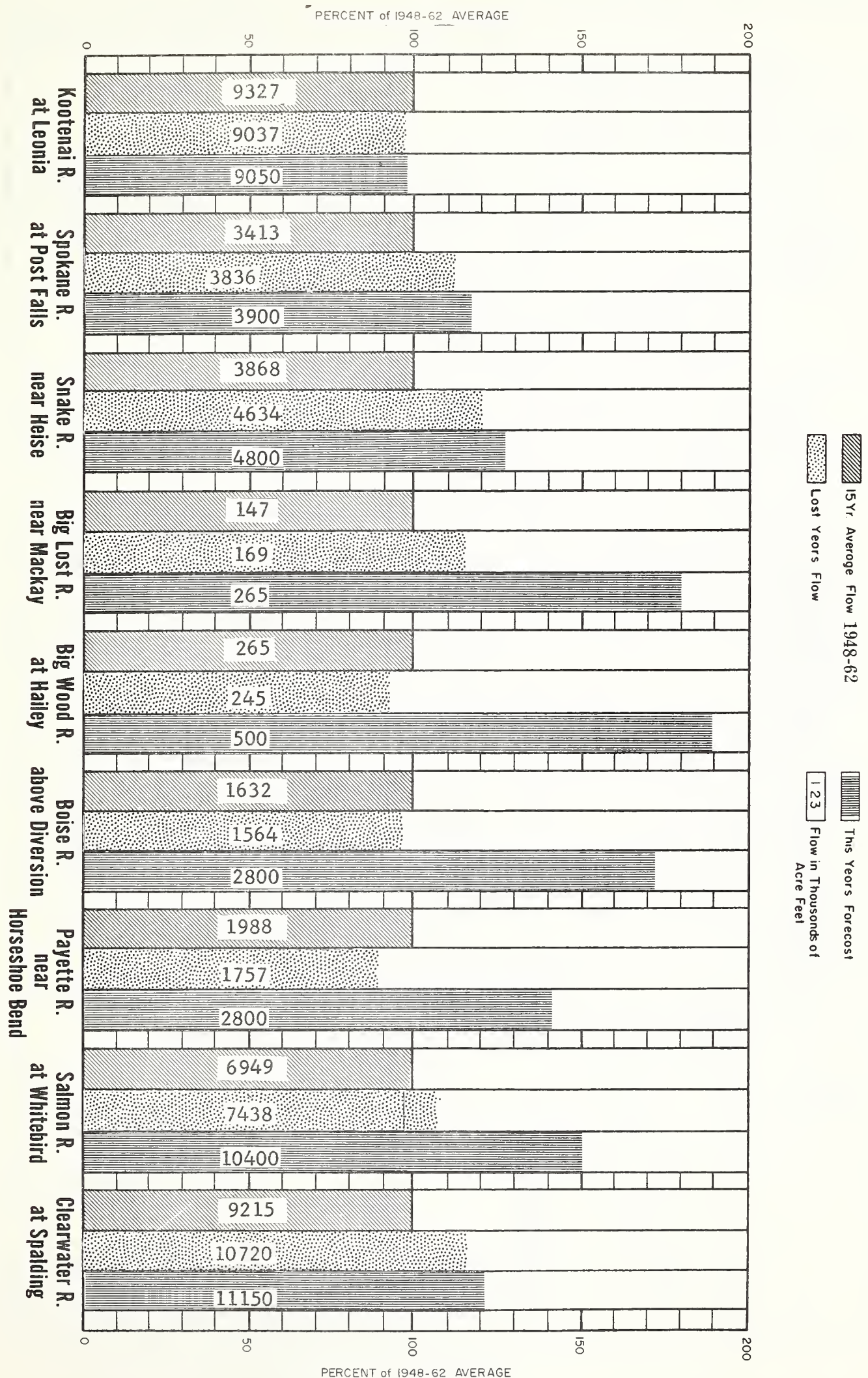
CLEARWATER RIVER

Spalding (at) 11150 Apr-Sep 8700 9215 121

(c) Assuming normal meteorological conditions.

1/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie canals. 2/ Corrected for storage in Jackson Lake and Palisades. 3/ Observed flow corrected for storage in Mackay Reservoir and diversion in Sharp Ditch. 4/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak. 5/ Corrected for storage in Cascade and Deadwood Reservoirs. 6/ From U.S.B.R. records of inflow.

STREAMFLOW FORECASTS (April through September period) *Based on Snow Surveys made on approximately*



RESERVOIR STORAGE (1,000 Ac. Ft.)

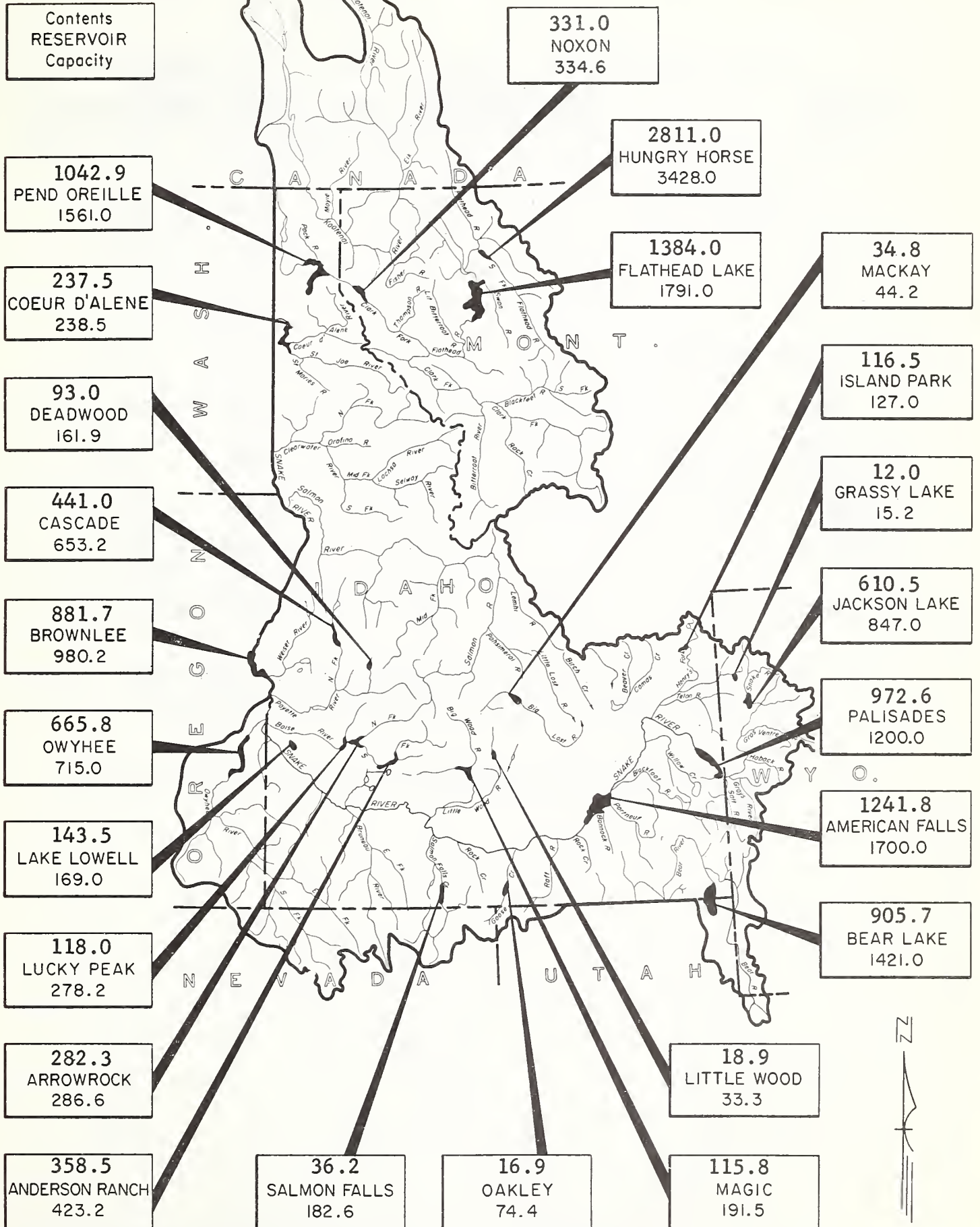
RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1948 - 62 AVERAGE
<u>UPPER COLUMBIA BASIN</u>				
<u>Clark Fork - Pend Oreille</u>				
Hungry Horse	3428.0	2811.0	2450.0	--
Flathead	1791.0	1384.0	1591.0	1042.9
Pend Oreille	1561.0	1042.9	612.6	728.1
Noxon	334.6	331.0	297.9	--
<u>Spokane</u>				
Coeur d'Alene	238.5	237.5	91.6	130.8
<u>SNAKE BASIN</u>				
<u>Snake</u>				
Jackson Lake	847.0	610.5	632.8	417.6
Palisades	1200.0	972.6	874.6	--
American Falls	1700.0	1241.8	1102.0	1301.0
Island Park	127.0	116.5	88.0	98.6
Grassy Lake	15.2	12.0	8.2	11.6
Brownlee	980.2	881.7	335.2	--
<u>Goose-Trapper Creeks</u>				
Oakley	74.4	16.9	10.6	12.5
<u>Salmon Falls Creek</u>				
Salmon Falls	182.6	36.2	29.3	17.8
<u>Big Lost</u>				
Mackay	44.2	34.8	37.6	28.5
<u>Big Wood</u>				
Magic	191.5	115.8	106.8	97.4
<u>Little Wood</u>				
Little Wood	30.0	18.9	18.4	--
<u>Boise</u>				
Anderson Ranch	423.2	358.5	261.2	163.4
Arrowrock	286.6	282.3	277.2	196.1
Lucky Peak	278.2	118.0	82.3	--
Lake Lowell (Deer Flat)	169.0	143.5	119.8	89.4
<u>Owyhee</u>				
Owyhee	715.0	665.8	286.0	752.4
<u>Payette</u>				
Cascade	653.2	441.0	328.4	--
Deadwood	161.9	93.0	85.3	65.7
<u>GREAT BASIN</u>				
<u>Bear</u>				
Bear Lake	1421.0	905.7	709.3	883.7

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

FEBRUARY 1, 1965

50 0 50 100 150
SCALE IN MILES



VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Fall		Winter	
	Sep.-Oct.-Nov. 1964		Dec. 1964-Jan. 1965	
	Observed	Departure <u>2/</u>	Observed	Departure <u>2/</u>
Kootenai, Canada & U. S.	7.01	+0.09	8.18	+1.39
Flathead	5.41	-0.13	7.87	+3.46
Clark Fork	1.59	-1.26	4.83	+2.89
Pend Oreille-Spokane	7.26	-1.68	11.94	+3.39
Upper Snake	3.90	-0.80	9.20	+4.56
Snow River Plain	2.28	+0.29	4.05	+2.06
Salmon-Payette-Boise	3.75	-0.66	12.35	+7.25
Clearwater	6.39	-0.65	11.07	+5.24
Southeastern Oregon	2.26	+0.06	5.25	+2.80

1/ Preliminary analysis by U. S. Weather Bureau from data furnished by Meteorological Service of Canada and U. S. Weather Bureau.

2/ Departure from 15-year (1948-62) drainage division average.

C A N A D A

117°00' 116°00'

49°00'

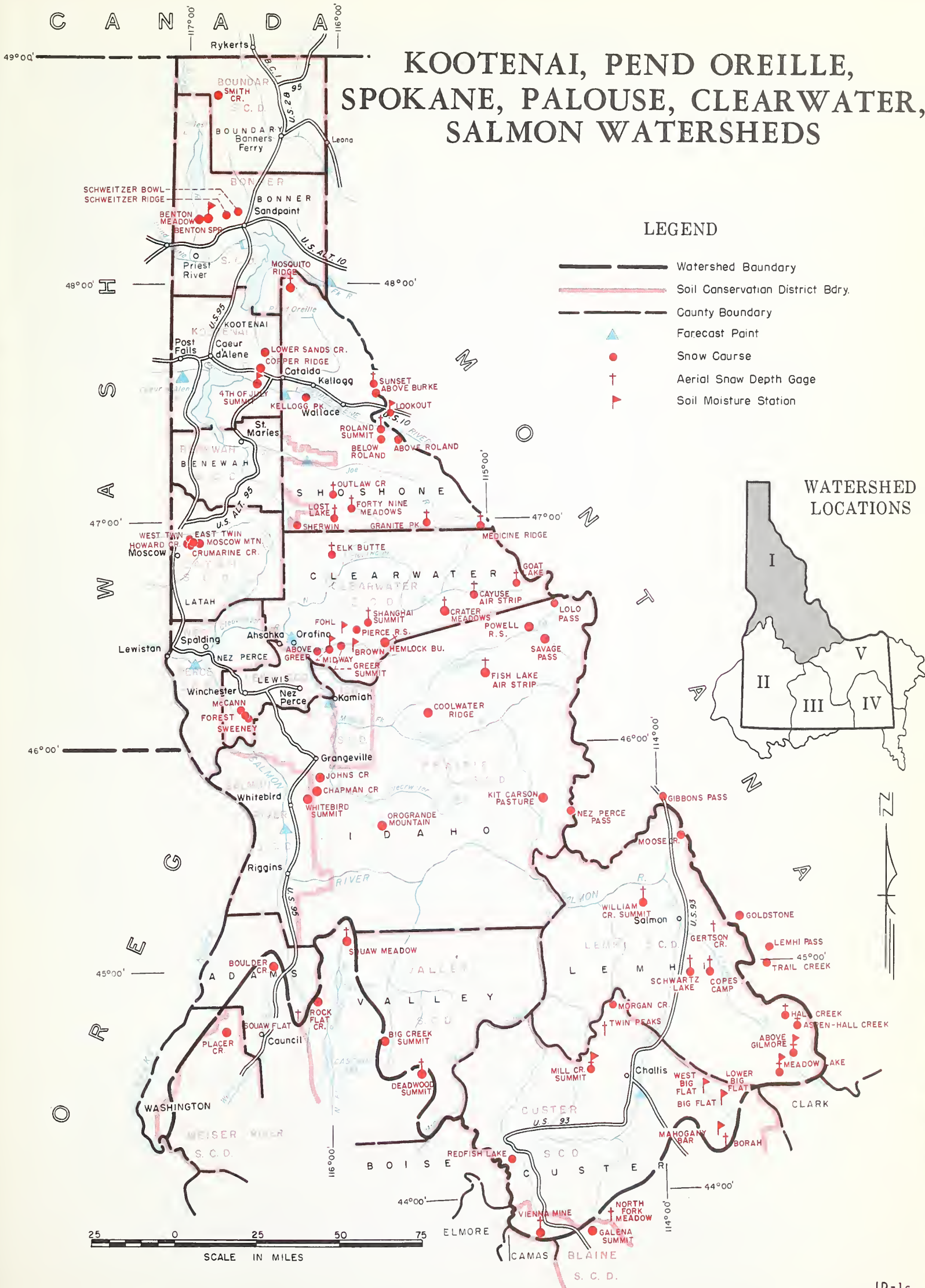
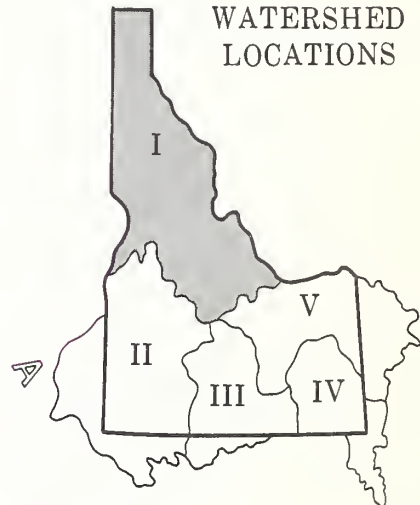
Rykerts

KOOTENAI, PEND OREILLE, SPOKANE, PALOUSE, CLEARWATER, SALMON WATERSHEDS

LEGEND

- Watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Aerial Snow Depth Gage
- Soil Moisture Station

WATERSHED LOCATIONS



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR ANO	LONG.	

KOOTENAI RIVER

16A1	I	Smith Creek	29	64N	3W	4800
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PRIEST RIVER

16A2	I	Benton Meadow	27	58N	4W	2344
16A3M	I	Benton Spring	30	58N	3W	4900
16A6	I	Schweitzer Bowl	20	2W	58N	4500
16A5	I	Schweitzer Ridge	19	2W	58N	6100

SPOKANE RIVER

15B8	I	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	34	47N	6E	3770
16B2	I	Copper Ridge	6 & 7	50N	1W	4800
16B3M	I	Fourth of July Summit	6	49N	1W	3100
15B13A	I	Granite Peak	3	42N	8E	6000
16B5A	I	Kellogg Peak	19	48N	3E	5560
15B2M	I	Lookout	4	47N	6E	5250
16B1	I	Lower Sands Creek	32	51N	1W	3400
15B4A	I	Medicine Ridge	24	43N	10E	6150
16A4A	I	Mosquito Ridge	5	54N	2E	5110
15B12	I	Outlaw Creek	19	44N	5E	3750
15B5A	I	Roland Summit	26	47N	6E	5200
16C1	I	Sherwin	28 & 33	42N	1E	3200
15B9A	I	Sunset	28	49N	5E	5600

BIG LOST RIVER

14F15a	I	North Fork Meadow	20	7N	18E	8150
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BIG WOOD RIVER

14F12M	I	Galena Summit	33	7N	15E	8795
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PAYETTE RIVER

15E2M	I	Big Creek Summit	24	15N	5E	6608
15E4A	I	Deadwood Summit	23	14N	7E	7000
16E1	I	Rock Flat Summit	1	13N	2E	5200
15D2A	I	Squaw Meadow	5	21N	4E	5800

WEISER RIVER

16D1	I	Boulder Creek	15	20N	1W	5000
16E5a	I	Squaw Flat	32	17N	2E	6230
16E2	I	Placer Creek	15 & 16	17N	3W	6000

SALMON RIVER

13E19AM	I	Above Gilmore	13	13N	26E	8200
13E21A	I	Aspen-Hall Pass	6	16N	28E	8110
13E11m	I	Big Flat	25	11N	23E	7050
13E8a	I	Borah	21	10N	23E	8250

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR ANO	LONG.	

16D2	I	Chapman Creek	16	29N	2E	4215
13E17A	I	Copes Camp	36	18N	22E	7500
13D17a	I	Gertson Creek	22	22N	23E	8050
13D2	M	Gibbons Pass	4	2S	19W	7100
13D9	M	Gold Stone	11	8S	16W	8100
13E20A	I	Hall Creek	1	16N	27E	7560
16D3	I	Johns Creek	9	29N	2E	3805
13E1	M	Lemhi Pass	9	10S	15W	7480
13E13m	I	Lower Big Flat	31	12N	24E	6500
13E10m	I	Mahogany Bar	10	10N	23E	7900
13E18AM	I	Meadow Lake	24	13N	26E	9100
14E1MA	I	Mill Creek Summit	8	13N	17E	8870
13D16	I	Moose Creek	22 & 26	27N	21E	6200
14E4	I	Morgan Creek	32	18N	19E	7580
14E2	I	Redfish Lake	3	9N	13E	6600
13E16A	I	Schwartz Lake	34	18N	22E	8500
13E2	M	Trail Creek	15	10S	15W	7090
14E3a	I	Twin Peaks	28	15N	17E	9190
14F4A	I	Vienna Mine	32	6N	14E	8900
13E12m	I	West Big Flat	35	12N	23E	6550
16D5	I	Whitebird Summit	17	29N	2E	4390
14D4	I	Williams Creek Summit	34	21N	20E	7800

CLEARWATER RIVER

16C11	I	Above Greer	14	35N	2E	1240
16C14m	I	Brown	11	35N	3E	3100
15C3A	I	Cayuse Airstrip	4	38N	11E	3700
15C7	I	Coolwater Mountain	32	33N	8E	6200
15C9A	I	Crater Meadows	2	37N	9E	6100
16C15A	I	Elk Butte	6	40N	3E	5550
15C2A	I	Fish Lake Airstrip	35	35N	11E	5000
15C8m	I	Fohl	16	36N	5E	3450
16C9	I	Forest	1	32N	3W	4550
15B3	I	Forty-nine Meadows	6	43N	5E	5000
14C9A	I	Goat Lake	4	38N	13E	6600
16C13	I	Greer Summit	13	35N	2E	3000
15C6A	I	Hemlock Butte	12	36N	6E	5500
14D3	I	Kit Carson Pasture	4	27N	16E	5020
14C5	M	Lolo Pass	11	10N	24W	5230
15B14A	I	Lost Lake	16	43N	4E	6000
16C8	I	McCann	25	33N	3W	4300
16C12M	I	Midway	14	35N	2E	2200
14D1	M	Nezperce Pass	25	1S	24W	6575
15D4	I	Orogrande Mountain	24	27N	6E	7800
15C5	I	Pierce Ranger Station	2	36N	5E	3171
14C6	I	Powell Ranger Station	33	37N	14E	4230
14C4	I	Savage Pass	18	36N	15E	6600
15C4A	I	Shanghai Summit	7	37N	6E	4600
16C10	I	Sweeney	1	32N	3W	4435

PALOUSE RIVER

16C6	I	Crumarine Creek	24	40N	5W	3500
16C3	I	East Twin	13	40N	5W	4000
16C5	I	Howard Creek	14	40N	5W	3500
16C2	I	Moscow Mountain	18	40N	4W	4800
16C4	I	West Twin	14	40N	5W	4200

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	AVERAGE ^b

PEND OREILLE - PRIEST RIVER

Benton Meadow	16A2	2344	2/1	30	8.9	7.6	5.6
Benton Spring	16A3	4900	1/28	55	15.7	14.2	14.7
Schweitzer Bowl	16A6	4500	1/29	80	23.3	27.4	--
Schweitzer Ridge	16A5	6100	1/29	109	38.3	34.0	--

SPOKANE RIVER

Fourth of July Smt.	16B3	3100	1/28	37	8.9	10.9	--
Granite Peak (A)	15B13	6000	2/2	120	40.9	30.1	--
Lookout	15B2	5250	1/27	101	27.7	26.7	26.4
Medicine Ridge (A)	15B4	6150	2/2	136	46.4	35.3	--
Outlaw Creek (A)	15B12	3750	2/2	36	11.6	15.6	--
Sherwin	16C1	3200	1/29	40	12.4	14.1	--

CLEARWATER RIVER

Above Greer	16C11	1240	1/29	2	0.5	0.0	--
Buck Meadows (A)	15D5	5600	2/2	63	21.5	--	--
Cayuse Airstrip (A)	15C3	3700	2/2	45	14.4	10.1	8.0*
Crater Meadows (A)	15C9	6100	2/2	120	40.9	30.1	--
Elk Butte (A)	16C15	5550	2/2	101	34.4	30.3	--
Fish Lake Airstrip(A)	15C2	5000	2/2	105	35.8	27.7	27.1*
Forest	16C9	4550	1/27	28	8.0	6.5	6.0*
Forty-nine Meadows(A)	15B3	5000	2/2	82	28.0	26.6	--
Goat Lake (A)	14C9	6600	2/2	124	42.3	28.2	--
Granite Peak (A)	15B13	6000	2/2	120	40.9	30.1	--
Greer Summit	16C13	3000	1/29	9	2.7	3.1	--
Hemlock Butte	15C6	5500	1/31	135	46.0	38.2	--
Lost Lake (A)	15B14	6000	2/2	144	49.1	34.3	--
McCann	16C8	4300	1/27	22	5.8	4.8	6.5*
Medicine Ridge (A)	15B4	6150	2/2	136	46.4	35.3	--
Midway	16C12	2200	1/29	4	1.3	1.0	--
Mountain Meadows (A)	15D6	6300	2/2	84	28.6	--	--
Pierce Rgr. Sta.	15C5	3171	1/29	42	13.5	11.4	9.5*
Shanghai Summit (A)	15C4	4600	2/2	82	28.0	21.7	--
Sweeney	16C10	4435	1/27	21	5.9	5.0	6.5*

PALOUSE RIVER

Crumarine Creek	16C6	3500	1/31	25	8.3	11.5	5.8*
East Twin	16C3	4000	1/31	35	12.3	15.7	10.1*
Howard Creek	16C5	3500	1/30	18	6.3	8.7	3.6*
Moscow Mountain	16C2	4800	1/31	49	15.8	16.1	14.0*
West Twin	16C4	4200	1/30	34	10.5	10.5	8.8*

(b) 1948-62, 15 year period. * Not located directly on this drainage. * Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

2
SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

SALMON RIVER

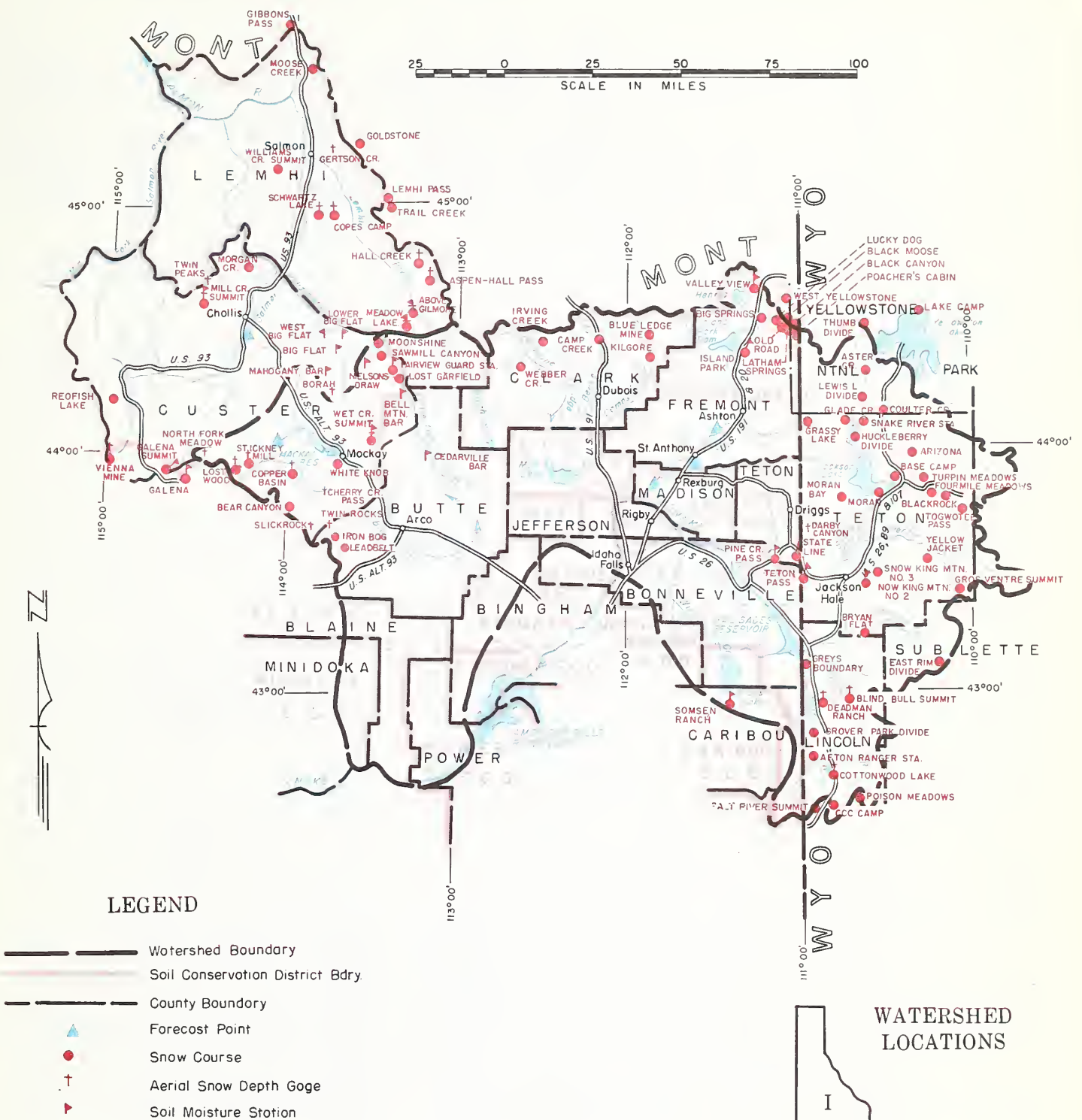
Big Creek Summit	15E2	6600	2/1	121	42.1	21.5	22.6*
Borah (A)	13E8	8250	2/1	22	6.7	5.1	--
#Boulder Creek	16D1	5500	1/28	103	29.3	14.4	--
Chapman Creek	16D2	4215	1/29	17	4.6	4.4	3.3*
#Deadwood Summit (A)	15E4	7000	1/31	168	58.5	27.4	34.8*
#Galena Summit	14F12	8795	1/27	102	32.0	16.6	15.1*
#Gibbons Pass	13D2	7100	1/28	83	23.8	16.8	15.7*
Johns Creek	16D3	3805	1/29	11	3.4	2.5	2.9*
Mill Creek Summit (A)	14E1	8870	2/1	112	35.2	11.3	--
Moose Creek	13D16	6200	1/28	67	17.0	14.0	11.4*
Morgan Creek Summit	14E4	7580	1/29	77	22.6	8.5	--
#Rock Flat Summit	16E1	5200	1/27	74	19.6	12.4	12.6
#Squaw Flat (A)	16E5	6230	1/31	89	31.0	12.6	--
#Squaw Meadows (A)	15D2	5800	1/31	123	42.8	21.7	24.9*
Twin Peaks (A)	14E3	10300	2/1	106	33.3	10.5	--
Vienna Mine (A)	14F4	8900	1/31	128	40.2	19.9	--
Whitebird Summit	16D5	4390	1/29	30	7.9	6.6	6.0*

Lemhi River

Above Gilmore (A)	13E19	8200	2/1	59	16.1	6.0	--
Aspen-Hall Pass (A)	13E21	8110	2/1	45	12.3	8.0	--
Copes Camp (A)	13E17	7500	2/1	42	12.3	3.7	--
Gertson Creek (A)	13D17	8050	2/1	45	13.7	6.2	--
Hall Creek (A)	13E20	7560	2/1	21	5.7	3.8	--
Meadow Lake (A)	13E18	9100	2/1	87	28.9	12.0	--
Schwartz Lake (A)	13E16	8500	2/1	58	19.3	7.7	--

(b) 1948-62, 15 year period. # Not located directly on this drainage. * Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

UPPER SNAKE, HENRY'S FORK, TETON, CAMAS - BEAVER CREEK, LITTLE LOST, BIG LOST, UPPER SALMON WATERSHEDS



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC. LAT.	TWP. OR AND	RGE. LONG.	ELEV.
SNAKE RIVER - WYOMING						
10G4	WY	Afton Ranger Station	30	32N	118W	6200
10F1	WY	Arizona	3	46N	115W	6850
10E8	WY	Aster Creek	44°17'		110°38'	7700
10F2	WY	Base Camp	20	46N	113W	6900
10F7	WY	Blackrock	4	44N	111W	8600
10G2A	WY	Blind Bull	6	34N	115W	8750
10F14	WY	Bryan Flat	9	38N	115W	6250
10E3	WY	Canyon	44°44'		110°30'	7750
10G7	WY	CCC Camp	9	29N	118W	7500
10G5A	WY	Cottonwood Lake	25	31N	118W	7500
10E10	WY	Coulter Creek	44°09'		110°33'	7600
10G1A	WY	Deadman Ranch	26	34N	116W	6534
10F17	WY	East Rim Divide	32	37N	111W	7950
10F6	WY	Four Mile Meadows	35	45N	112W	7770
10E13	WY	Glade Creek	12	48N	116W	7200
10F18	WY	Greys Boundary	33	37N	118W	5800
10F19	WY	Gros Ventre Summit	36	40N	111W	8750
10G3	WY	Grover Park Divide	27	33N	118W	7500
10E14	WY	Huckleberry Divide	32	48N	115W	7300
10E4	WY	Lake Camp	44°34'		110°24'	7850
10E9	WY	Lewis Lake Divide	44°13'		110°40'	7900
10F4	WY	Moran	8 & 17	45N	114W	6800
10F3	WY	Moran Bay	14	45N	116W	6800
10E2	WY	Norris Basin	44°44'		110°42'	7500
10G6	WY	Poison Meadows	29	30N	116W	8500
10G8	WY	Salt River Summit	32	29N	118W	7900
10E12	WY	Snake River Station	9	48N	115W	6780
10F20	WY	Snow King Mountain #3	4	40N	117W	7600
10E5	WY	Sylvan Pass	12	52N	110W	7100
10E7	WY	Thumb Divide	44°22'		110°35'	7900
10F9	WY	Togwotee Pass	29	44N	110W	9600
10F5	WY	Turpin Meadows	14	45N	112W	6930
10F10	WY	Yellowjacket	33	42N	112W	7675

HENRYS FORK RIVER

11E9	I	Big Springs	34	14N	44E	6500
11E18	I	Black Canyon	11	13N	45E	7850
11E19	I	Black Moose	33	14N	45E	8125
10E15	WY	Grassy Lake	6	48N	117W	7230
11E10M	I	Island Park	29	13N	43E	6315
11E16	I	Latham Springs	9	13N	45E	7650
11E14	I	Lucky Dog	2	13N	45E	6900
11E15	I	Old Road	12	13N	44E	7250
11E17	I	Poacher's Cabin	11	13N	45E	8000
11E8M	I	Valley View	7	15N	44E	6500
11E7	M	West Yellowstone	34	13S	5E	6700

TETON RIVER

10F21a	WY	Darby Canyon	28	43N	118W	8250
11F2M	I	Pine Creek Pass	24	3N	44E	6750
11F1M	I	State Line	32	3N	46E	6400
10F13M	WY	Teton Pass	24	41N	118W	8500

CAMAS - BEAVER CREEK

11E11	I	Blue Ledge Mine	27	13N	33E	6700
12E3	I	Camp Creek	21	13N	36E	6800
11E12	I	Kilgore	6	12N	39E	6200

MEDICINE LODGE CREEK

12E4	I	Irving Creek	8	13N	33E	7035
12E5	I	Webber Creek	23	12N	32E	6700

LITTLE LOST RIVER

13F16m	I	Cedarville Bar	31	7N	28E	5400
13E5M	I	Fairview Guard Station	27	12N	26E	6750
13E15m	I	Bell Mtn. Bar	36	11N	26E	6640
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6	I	Moonshine	31	13N	26E	7450
13E14m	I	Nielson's Draw	26	11N	25E	6400
13E4	I	Sawmill Canyon	17	12N	26E	6900
13E7MA	I	Wet Creek Summit	15	8N	25E	8175

NO.	STATE	NAME	SEC. LAT.	TWP. OR AND	RGE. LONG.	ELEV.
BIG LOST RIVER						
13F3	I	Bear Canyon	26	5N	21E	8600
13F13a	I	Cherry Creek Pass	7	5N	23E	8900
13F2A	I	Copper Basin	24	6N	21E	8000
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6800
14F3A	I	Lost Wood Divide	19	6N	19E	8750
14F15a	I	North Fork Meadow	20	7N	18E	8150
13F14a	I	Slickrock	17	4N	22E	8640
14F2A	I	Stickney Mill	9	6N	19E	7500
13F15a	I	Twin Rocks	22	4N	22E	8100
13F1	I	White Knob	25	7N	23E	7700

BIG WOOD RIVER

14F1M	I	Galena	3	6N	15E	7300
14F12M	I	Galena Summit	33	7N	15E	8795

SALMON RIVER

13E19AM	I	Above Gilmore	13	13N	26E	8200
13E21A	I	Aspen-Hall Pass	6	16N	28E	8110
13E11m	I	Big Flat	25	11N	23E	7050
13E8a	I	Borah	21	10N	23E	8250
13E17A	I	Copes Camp	36	18N	22E	7500
13D17a	I	Gertson Creek	22	22N	23E	8050
13D2	M	Gibbons Pass	4	2S	19W	7100
13D9	M	Gold Stone	11	8S	16W	8100
13E20A	I	Hall Creek	1	16N	27E	7560
13E1	M	Lemhi Pass	9	10S	15W	7480
13E13m	I	Lower Big Flat	31	12N	24E	6500
13E10m	I	Mahogany Bar	10	10N	23E	7900
13E18AM	I	Meadow Lake	24	13N	26E	9100
14E1MA	I	Mill Creek Summit	8	13N	17E	8870
13D16	I	Moose Creek	22 & 26	27N	21E	6200
14E4	I	Morgan Creek	32	18N	19E	7580
14E2	I	Redfish Lake	3	9N	13E	6600
13E16A	I	Schwartz Lake	34	18N	22E	8500
13E2	M	Trail Creek	15	10S	15W	7090
14E3a	I	Twin Peaks	28	15N	17E	9190
14F4A	I	Vienna Mine	32	6N	14E	8900
13E12m	I	West Big Flat	35	12N	23E	6550
14D4	I	Williams Creek Summit	34	21N	20E	7800

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

MEDICINE LODGE - CAMAS - BEAVER CREEKS

Camp Creek	12E3	6800	1/29	44	13.3	5.0	6.5
Irving Creek	12E4	7035	1/29	29	7.7	2.5	--
Kilgore	11E12	6200	1/28	39	10.6	6.0	6.4
Webber Creek	12E5	6700	1/27	31	7.7	3.0	--

HENRY'S FORK RIVER

Big Springs	11E9	6500	1/28	81	22.2	11.4	13.7
Grassy Lake	10E15	7230	1/28	103	32.8	19.7	22.3*
Island Park	11E10	6315	1/29	73	19.4	8.7	10.8
Valley View	11E8	6500	1/29	76	23.5	11.5	9.6

Teton River

Darby Canyon (A)	10F21	8250	1/26	62	16.3	13.3	--
Pine Creek Pass	11F2	6750	1/26	60	15.8	11.7	--
State Line	11F1	6400	1/27	48	13.0	9.8	9.8
Teton Pass	10F13	8500	1/27	92	28.7	17.7	22.4

LITTLE LOST RIVER

Fairview Guard Sta.	13E5	5850	1/28	25	5.4	5.2	3.5*
Lost-Garfield	13E3	5700	1/28	24	5.5	3.1	2.8*
Moonshine	13E6	7250	1/29	60	16.4	8.4	7.5*
Sawmill Canyon	13E4	6000	1/29	47	13.0	6.6	6.2*
Wet Creek Summit (A)	13E7	8175	2/1	62	16.9	--	6.6*

BIG LOST RIVER

Cherry Creek Pass (A)	13F13	8900	1/31	13	4.0	2.6	--
Copper Basin (A)	13F2	8000	1/31	55	17.3	8.0	--
Leadbelt	13F12	6800	2/2	51	15.5	6.1	--
Lost-Wood Divide (A)	14F3	8750	1/31	96	30.1	16.3	--
North Fork Meadow (A)	14F15	8150	1/31	59	18.5	8.9	--
Slickrock (A)	13F14	8640	1/31	93	29.2	12.5	--
Stickney Mill (A)	14F2	7500	1/31	40	12.7	5.4	--
White Knob	13F1	7700	1/27	42	12.8	6.6	4.7*

WILLOW-SAND CREEKS

Birch Creek		6800	1/26	39	12.3	--	--
Bone		6200	1/28	31	9.1	--	--
Taylor Mountain		6600	1/27	29	8.2	--	--
Ozone		5800	1/28	7	1.8	--	--

(b) 1948-62, 15 year period. * Not located directly on this drainage. * Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

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SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

BLACKFOOT RIVER

Austin Bros. Ranch	11G3	6450	1/28	33	8.3	6.2	5.2*
China Hat	11G2	6300	1/29	21	5.4	5.0	4.9*
Slug Creek Divide	11G5	7225	2/2	58	19.1	10.1	--
Somsen Ranch	11G1	7000	1/29	51	15.2	8.7	7.8*

FORTNEUF RIVER

Dempsey Creek	12G5	6280	1/28	39	10.0	7.2	7.2*
Mink Creek	12G1	6300	1/30	40	14.0	11.0	10.0*
Pebble Creek	12G2	6550	1/28	51	15.8	10.0	9.2*

BEAR RIVER

Emigrant Summit	11G6	7350	2/2	81	29.4	13.5	--
Emigration Canyon	11G7	6500	2/2	34	11.0	6.6	--

Montpelier Creek

Giveout	11G16	6840	2/1	44	14.8	7.8	--
Little Beaver	11G20	6970	2/1	53	17.7	10.5	--
Montpelier Creek	11G18	6570	1/28	40	10.8	4.5	--
Whiskey Flat	11G21	6985	2/1	39	13.0	6.1	--

Mink Creek

Christensen Ranch	11G11	5600	2/3	24	7.5	5.9	6.4*
Dry Basin (A)	11G14	7900		Delayed		16.0	--
Horseshoe Basin (A)	11G15	8000		Delayed		14.0	--
Liberty Spring	11G13	8600		Delayed		19.4	--
Strawberry Creek	11G9	5800	2/3	35	11.2	7.3	7.7*
Strawberry Mink Divide	11G10	6800	2/3	65	24.4	12.0	13.5*

Cub River

Cub River Rgr. Sta.	11G12	5400	2/2	21	6.6	6.6	6.5*
Willow Flat	11G4	6100	2/2	42	15.4	10.4	9.7*

MALAD RIVER

Dry Creek Flat	12G4	6350	1/28	31	8.0	5.7	4.7*
Oxford Mountain	12G3	6800	1/28	46	12.0	--	6.2*

(b) 1948-62, 15 year period. * Not located directly on this drainage. * Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

A horizontal scale bar with markings at 25, 0, 25, and 50. Below the bar, the text "SCALE IN MILES" is centered.



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR ANO	LONG.	

SNAKE RIVER - WYOMING

10G4	WY	Afton Ranger Station	30	32N	118W	6200
10F1	WY	Arizona	3	46N	115W	6850
10E8	WY	Aster Creek	44°17'		110°38'	7700
10F2	WY	Base Camp	20	46N	113W	6900
10F7	WY	Blackrock	4	44N	111W	8600
10G2A	WY	Blind Bull	6	34N	115W	8750
10F14	WY	Bryan Flat	9	38N	115W	6250
10E3	WY	Canyon	44°44'		110°30'	7750
10G7	WY	CCC Camp	9	29N	118W	7500
10G5A	WY	Cottonwood Lake	25	31N	118W	7500
10E10	WY	Coulter Creek	44°09'		110°33'	7600
10G1A	WY	Deadman Ranch	26	34N	116W	6534
10F17	WY	East Rim Divide	32	37N	111W	7950
10F6	WY	Four Mile Meadows	35	45N	112W	7770
10E13	WY	Glade Creek	12	48N	116W	7200
10F18	WY	Greys Boundary	33	37N	118W	5800
10F19	WY	Gros Ventre Summit	36	40N	111W	8750
10G3	WY	Grover Park Divide	27	33N	118W	7500
10E14	WY	Huckleberry Divide	32	48N	115W	7300
10E4	WY	Lake Camp	44°34'		110°24'	7850
10E9	WY	Lewis Lake Divide	44°13'		110°40'	7900
10F4	WY	Moran	8 & 17	45N	114W	6800
10F3	WY	Moran Bay	14	45N	116W	6800
10E2	WY	Norris Basin	44°44'		110°42'	7500
10G6	WY	Poison Meadows	29	30N	116W	8500
10E8	WY	Salt River Summit	32	29N	118W	7900
10E12	WY	Snake River Station	9	48N	115W	6780
10F20	WY	Snow King Mountain #3	4	40N	117W	7600
10E5	WY	Sylvan Pass	12	52N	110W	7100
10E7	WY	Thumb Divide	44°22'		110°35'	7900
10F9	WY	Togwotee Pass	29	44N	110W	9600
10F5	WY	Turpin Meadows	14	45N	112W	6930
10F10	WY	Yellowjacket	33	42N	112W	7675

TETON RIVER

10F21a	WY	Darby Canyon	28	43N	118W	8250
11F2M	I	Pine Creek Pass	24	3N	44E	6750
11F1M	I	State Line	32	3N	46E	6400
10F13M	WY	Teton Pass	24	41N	118W	8500

BLACKFOOT RIVER

11G3	I	Austin Brothers Ranch	28	7S	43E	6450
11G2M	I	China Hat	17	7S	42E	6300
11G5	I	Slug Creek Divide	15	10S	44E	7225
11G1M	I	Somsen Ranch	25	5S	43E	7000

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR ANO	LONG.	

PORTNEUF RIVER

12G5M	I	Dempsey Creek	17	10S	38E	6280
12G7m	I	Lower Dempsey	5	10S	38E	5210
12G6m	I	Lower Pebble	7	8S	38E	5800
12G1	I	Mink Creek	33	7S	34E	6300
12G2M	I	Pebble Creek	34	7S	37E	6550

BEAR RIVER

10G11	Wy	Big Park	7	27N	117W	8700
11G11	I	Christensen Ranch	27	13S	41E	5600
11G12	I	Cub River Ranger Station	5	15S	41E	5400
11G14a	I	Dry Basin	30	13S	42E	7900
11H13MP	U	Dry Bread Pond	19	8N	4E	8230
11G6M	I	Emigrant Summit	21	12S	42E	7350
11G7	I	Emigration Canyon (mouth)	24	12S	42E	6500
11G8M	I	Franklin Basin	1	16S	41E	8000
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6	U	Goodman Ranch	19	3N	10E	7900
10J7	U	Hayden Fork	1	1S	9E	9300
11G15a	I	Horseshoe Basin	31	13S	42E	8000
10G12	Wy	Kelly Ranger Station	13	26N	118W	8200
11G13A	I	Liberty Spring	7	13S	42E	8600
11H12P	U	Monte Cristo R. S.	3	8N	4E	8960
10G10	W	Piney LaBarge x	19	29N	114W	8820
10J17P	U	Stillwater Camp	32	2N	10E	8550
11G10	I	Strawberry Mink Divide	14	13S	41E	6800
11G9M	I	Strawberry Creek	9	13S	41E	5800
11G4P	I	Willow Flat	2	15S	41E	6100

MALAD RIVER

12G4	I	Dry Creek Flat	31	13S	37E	6350
12G3	I	Oxford Mountain	32	13S	37E	6800

MONTPELIER CREEK

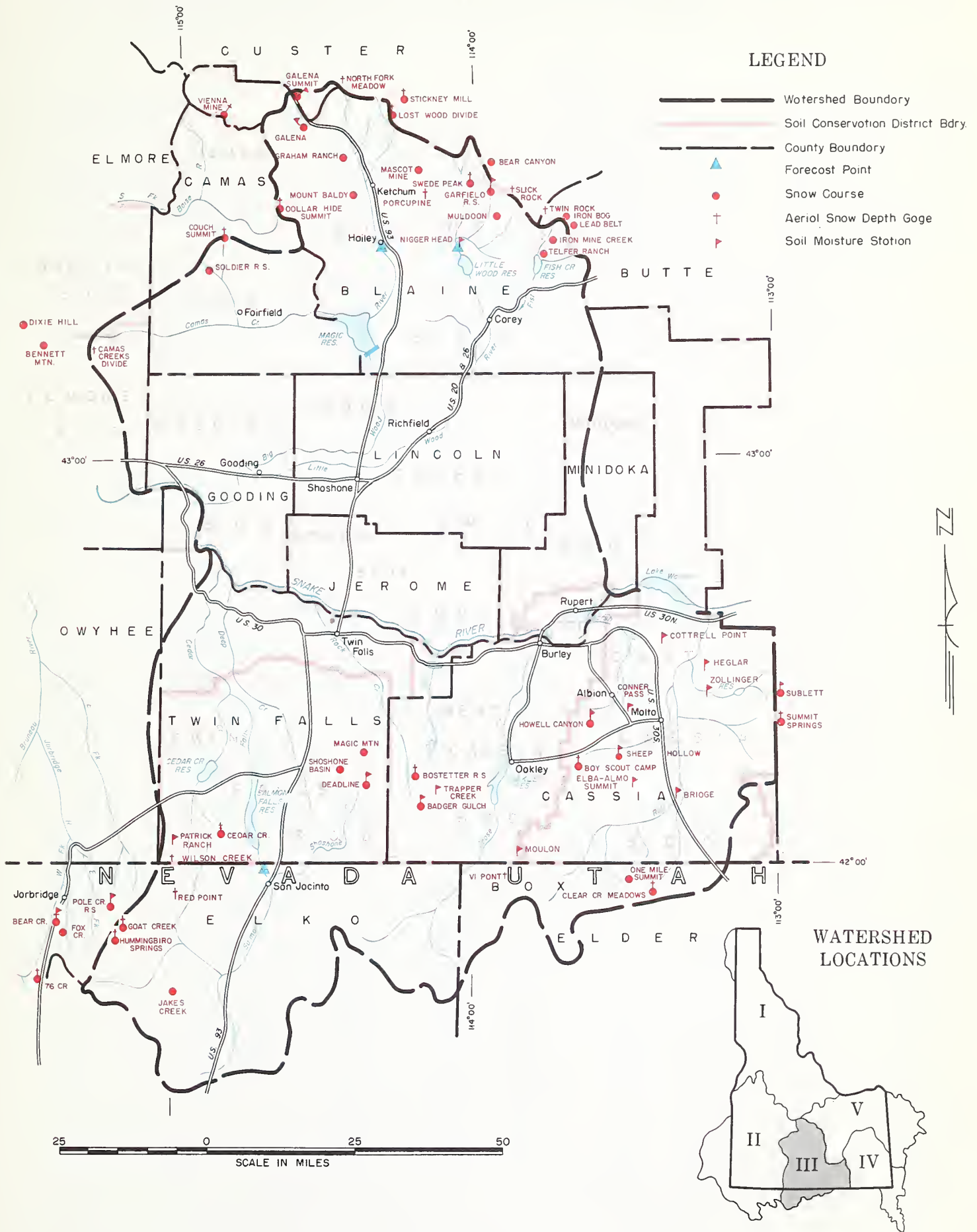
11G16	I	Giveout	35	11S	45E	6840
11G17m	I	Giveout Pass	2	12S	45E	7025
11G19m	I	Jenson Ranch	15	12S	45E	6580
11G20	I	Little Beaver	26	11S	45E	6970
11G18	I	Montpelier Creek	22	12S	45E	6570
11G21	I	Whiskey Flat	26	11S	45E	6985

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

SNAKE RIVER, BIG WOOD, LITTLE WOOD, RAFT, GOOSE CREEK, SALMON FALLS CREEK WATERSHEDS



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC. TWP. RGE. ELEV.	
			<div>LAT. AND</div>	<div>OR LONG.</div>
RAFT RIVER				
13G2A	I	Boy Scout Camp	12 14S	23E 7600
13G11m	I	Bridge	7 15S	27E 4750
13H2A	U	Clear Creek Meadows	26 14N	14W 9050
13G6	I	Conner Pass	35 12S	25E 5700
13G7m	I	Cottrell Point	24 10S	25E 4490
13G10m	I	Elba-Almo Summit	29 14S	25E 5690
13G8m	I	Heglar	19 11S	28E 4590
13G1M	I	Howell Canyon	2 13S	24E 8000
13G12m	I	Moulton	27 16S	23E 5950
13H1	U	One Mile Summit	19 14N	14W 7330
13G5M	I	Sheep Hollow	4 14S	24E 6200
13G3M	I	Sublett	8 12S	30E 6000
13G4A	I	Summit Springs	15 13S	30E 8500
13G9m	I	Zollinger	2 13S	28E 5000

GOOSE - TRAPPER CREEK

14G3M	I	Badger Gulch	24 15S	19E 6660
14G1A	I	Bostetter Ranger Station	35 14S	19E 7500
14G7m	I	Trapper Creek	2 15S	20E 5300
13H3a	U	Vi Pont	17 14N	17W 7670

SALMON FALLS CR. - BRUNEAU RIVER

15H1MA	N	Bear Creek	31 46N	58E 7800
14G5A	I	Cedar Creek	25 15S	13E 7000
14G4M	I	Deadline	25 14S	18E 6900
15H2	N	Fox Creek	33 46N	58E 6800
15H13A	N	Goat Creek	31 46N	60E 8800
15H15A	N	Hummingbird Springs	6 45N	60E 8945
14H1	N	Jakes Creek	6 42N	62E 7000
14G2	I	Magic Mountain	14 14S	18E 6700
15G1m	I	Patrick Ranch	23 15S	12E 5720
15H14M	N	Pole Creek Ranger Station	13 46N	59E 8330
15H18a	N	Red Point	15 47N	61E 7940
15H3A	N	Seventy Six Creek	6 44N	58E 7100
14G6	I	Shoshone Basin	24 14S	17E 5740
15G2a	I	Wilson Creek	24 16S	12E 7500

BIG WOOD RIVER

14F8A	I	Dollar Hide Summit	16 3N	15E 8620
14F1M	I	Galena	3 6N	15E 7300
14F12M	I	Galena Summit	33 7N	15E 8795
14F5	I	Graham Ranch	10 5N	17E 6200
14F7	I	Mascot Mine	8 4N	20E 7900
14F9	I	Mount Baldy	26 4N	17E 9000
14F11	I	Soldier Ranger Station	19 2N	14E 6100

LITTLE WOOD RIVER

13F4M	I	Garfield Ranger Station	11 3N	21E 6554
13F10	I	Iron Mine Creek	32 3N	23E 6370
13F5	I	Muldoon	25 3N	21E 6300
14F13m	I	Niggerhead	26 2N	20E 5450
14F14a	I	Porcupine	30 4N	20E 8350
13F9A	I	Swede Peak	4 3N	21E 7500
13F6	I	Telfer Ranch	12 2N	22E 6000

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
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SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

BIG WOOD RIVER

Camas Creeks Div. (A)	15F9	5720	2/1	27	8.9	10.7	--
#Couch Summit (A)	14F10	6950	1/31	61	19.2	13.6	13.1*
Dollarhide Summit (A)	14F8	8620	1/31	107	36.3	15.2	17.6*
Galena	14F1	7500	1/27	94	29.8	13.5	12.8*
Galena Summit	14F12	8795	1/27	102	32.0	16.6	15.1*
Graham Ranch	14F5	6200	1/28	67	22.2	10.4	9.2
#Lost Wood Divide (A)	14F3	8750	1/31	96	30.1	16.3	--
Mount Baldy	14F9	9000	1/28	94	31.2	13.8	13.6*
Soldier Rgr. Sta.	14F11	6100	2/2	45	14.6	6.5	7.9*

Little Wood River - Fish Creek

Garfield Rgr. Sta.	13F4	6554	1/26	58	17.5	6.8	7.0*
Muldoon	13F5	6300	1/26	43	12.4	5.1	5.5*
Porcupine (A)	14F14	8350	1/31	83	26.1	13.3	--
Swede Peak (A)	13F9	7500	1/31	85	26.9	11.0	7.2*

RAFT RIVER

Boy Scout Camp (A)	13G2	7600	2/1	68	26.1	9.2	--
Clear Creek Mdns. (A)	13H2	9050	2/1	70	26.9	17.5	--
Howell Canyon	13G1	8000	2/1	77	31.0	16.1	16.8*
Summit Springs (A)	13G4	8500	2/1	24	9.2	8.3	--

GOOSE CREEK

Badger Gulch	14G3	6660	1/28	40	11.0	7.7	--
Bostetter R. S. (A)	14G1	7500	2/1	59	22.7	13.9	10.9*
Vi Pont (A)	13H3	7670	2/1	43	16.5	10.7	--

SALMON FALLS CREEK

#Bear Creek (A)	15H1	7800	2/1	55	21.1	11.2	11.7*
Cedar Creek (A)	14G5	7000	2/1	22	8.4	9.6	6.8*
Deadline	14G4	6900	2/2	67	25.7	17.4	14.5*
Goat Creek (A)	15H13	8800	2/1	37	14.2	9.8	10.0*
#Hummingbird Spgs. (A)	15H15	8945	2/1	90	27.3	13.3	10.7*
Magic Mountain	14G2	6700	1/28	66	20.0	14.2	11.8*
#Pole Creek R. S.	15H14	8330	1/26	54	16.4	13.3	10.5*
Red Point (A)	15H18	7940	2/1	18	6.9	11.2	--
Shoshone Basin	14G6	5740	1/27	13	2.6	6.4	3.9*
Wilson Creek (A)	15G2	7500	2/1	32	12.3	10.7	--

(b) 1948-62, 15 year period. # Not located directly on this drainage. * Estimated 1948-62, 15 year Average. (A) Aerial observation: Water content estimated.

6
SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

BOISE RIVER

Atlanta Summit (A)	15F4	7500	1/31	144	50.1	20.3	20.9*
Bad Bear	15F2	5500	1/29	77	19.9	12.3	--
Bennett Mountain	15F7	6650	1/31	61	20.0	13.8	--
#Bogus Basin	16F2	6120	1/30	85	28.2	13.6	15.1
Bogus Basin Road	16F4	5360	1/30	25	8.6	11.0	2.5*
#Camas Creeks Div. (A)	15F9	5720	2/1	27	8.9	10.7	--
Couch Summit (A)	14F10	6950	1/31	61	19.2	13.6	13.1*
Danskin (A)	15F10	5650	2/1	51	16.7	11.7	--
Dixie Hill	15F8	5230	1/31	17	6.1	--	--
#Dollarhide Smt. (A)	14F8	8620	1/31	107	36.3	15.2	17.6*
Jackson Peak (A)	15E9	7000	2/1	117	40.7	24.0	20.5*
Little Camas Flat (A)	15F12	4950	2/1	13	4.7	8.6	--
Long Tom (A)	15F13	4550	2/1	2	0.7	6.2	--
Moore's Creek Summit	15F1	6100	2/2	113	38.3	23.0	20.9
Prairie	15F6	5600	1/29	37	12.1	7.1	4.6*
Road Creek (A)	15F3	6800	1/31	39	13.4	8.4	7.8*
#Soldier Rgr. Sta.	14F11	6100	2/2	45	14.6	6.5	7.9*
Trinity Mountain (A)	15F5	7400	1/31	155	53.9	24.0	29.1*
Vienna Mine (A)	14F4	8900	1/31	128	40.2	19.9	--
Willow Creek Cabin (A)	15F11	4710	2/1	6	2.2	6.2	--

PAYETTE RIVER

#Big Creek Summit	15E2	6600	2/1	121	42.1	21.5	23.9*
Bogus Basin	16F2	6120	1/30	85	28.2	13.6	15.1
Cozy Cove	15E8	5900	1/28	66	19.0	11.9	11.0
Crawford Rgr. Sta.	15E3	4800	2/1	31	10.2	6.6	5.5*
Deadwood Airstrip	15E10	5440	1/26	62	18.2	9.8	9.6*
Deadwood Dam	15E7	5500	1/28	70	21.1	11.1	11.7
Deadwood Summit (A)	15E4	7000	1/31	168	58.5	27.4	34.8*
Greenfield Flat (A)	16E7	7370	1/31	145	50.5	23.4	--
High Valley Summit	16E4	5170	2/3	43	14.4	--	--
#Jackson Peak (A)	15E9	7000	2/1	117	40.7	24.0	20.5*
Rock Flat Summit	16E1	5200	1/27	74	19.6	12.4	12.6
Silver Creek Ridge (A)	15E5	5700	2/1	69	20.8	14.0	--
Squaw Meadow (A)	15D2	5800	1/31	123	42.8	21.7	25.1*
Tripod Summit	16E3	5200	2/3	64	21.0	14.8	--

WEISER RIVER

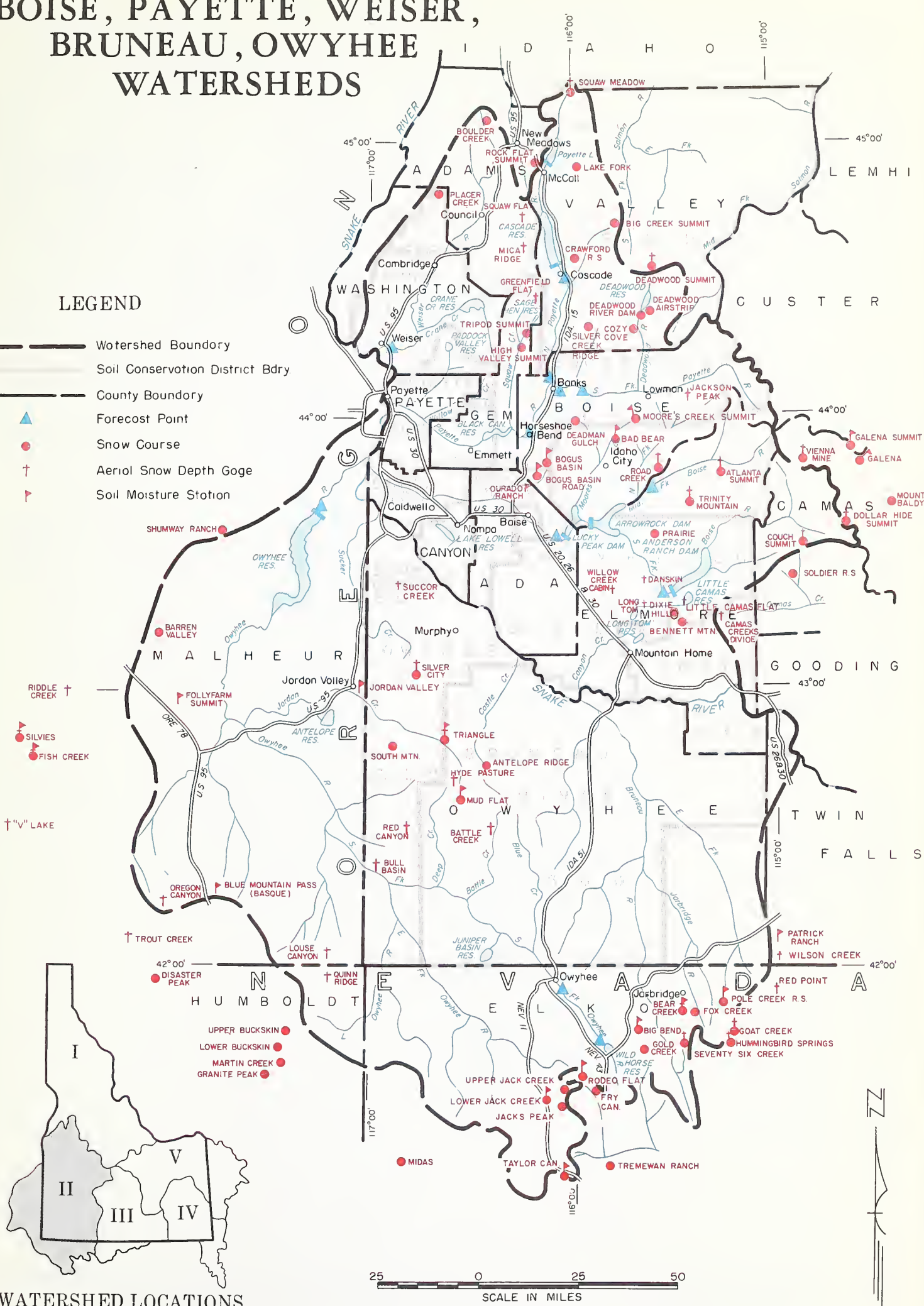
Boulder Creek	16D1	5500	1/28	103	29.3	14.4	--
Mica Ridge (A)	16E6	6800	1/31	114	39.7	22.9	--
Squaw Flat (A)	16E5	6230	1/31	89	31.0	12.6	--

(b) 1948-62, 15 year period. # Not located directly on this drainage. * Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

BOISE, PAYETTE, WEISER, BRUNEAU, OWYHEE WATERSHEDS

LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forecast Point
- Snow Course
- † Aerial Snow Depth Gage
- ▴ Soil Moisture Station



WATERSHED LOCATIONS

25 0 25 50
SCALE IN MILES

INDEX to SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR AND	LONG.	

SALMON FALLS CR. - BRUNEAU RIVER

15H1MA	N	Bear Creek	31	46N	58E	7800
14G5A	I	Cedar Creek	25	15S	13E	7000
14G4M	I	Deadline	25	14S	18E	6900
15H2	N	Fox Creek	33	46N	58E	6800
15H13A	N	Goat Creek	31	46N	60E	8800
15H15A	N	Hummingbird Springs	6	45N	60E	8945
14H1	N	Jakes Creek	6	42N	62E	7000
14G2	I	Magic Mountain	14	14S	18E	6700
15G1m	I	Patrick Ranch	23	15S	12E	5720
15H14M	N	Pole Creek Ranger Station	13	46N	59E	8330
15H18a	N	Red Point	15	47N	61E	7940
15H3A	N	Seventy Six Creek	6	44N	58E	7100
14G6	I	Shoshone Basin	24	14S	17E	5740
15G2a	I	Wilson Creek	24	16S	12E	7500

BIG WOOD RIVER

14F8A	I	Dollar Hide Summit	16	3N	15E	8620
14F1M	I	Galena	3	6N	15E	7300
14F12M	I	Galena Summit	33	7N	15E	8795
14F9	I	Mount Baldy	26	4N	17E	9000
14F11	I	Soldier Ranger Station	19	2N	14E	6100

BOISE RIVER

15F4A	I	Atlanta Summit	29	5N	10E	7500
15F2M	I	Bad Bear	35	7N	6E	5500
15F7	I	Bennett Mountain	7	2S	9E	6650
16F4	I	Bogus Basin Road	32	5N	3E	5360
16F5m	I	Bogus Basin Road	36	5N	2E	4830
15F9a	I	Camas Creeks Divide	11	2S	9E	5720
14F10A	I	Couch Summit	9	2N	14E	6950
15F10a	I	Danskin	17	1N	7E	5650
16F1	I	Deadman Gulch	24	7N	3E	6500
15F8	I	Dixie Hill	13	2S	8E	5230
15E9A	I	Jackson Peak	7	8N	9E	7000
15F12a	I	Little Camas Flat	21	1S	9E	4950
15F13a	I	Long Tom	19	1S	8E	4550
15F1M	I	Moore's Creek Summit	19	7N	7E	6100
15F6	I	Prairie	13	2N	7E	5600
15F3A	I	Road Creek	5	5N	8E	6800
15F5A	I	Trinity Mountain	7	3N	9E	7400
15F11a	I	Willow Creek Cabin	26	1N	6E	4710

OWYHEE RIVER

16G6	I	Antelope Ridge	20	8S	1E	5900
18F5	O	Barren Valley	26	27S	38E	4200
16G9a	I	Battle Creek	10	11S	1E	5700
15H4M	N	Big Bend	30	45N	56E	6700
17G2m	O	Blue Mountain Pass (Basque)	4	38S	42E	5290
16G10a	I	Bull Basin	29	12S	6W	5600
18H1	N	Disaster Peak	8	47N	34E	6500
18G2MA	O	Fish Creek	4	33S	33E	7900
18G3m	O	Folly Farm Summit	8	30S	38E	4450
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	31	45N	56E	6600
17H4	N	Granite Peak	22	44N	39E	7800
16G5a	I	Hyde Pasture	SE 1/4 31	8S	2W	5800
16H4	N	Jacks Peak	28	42N	53E	8420
17G3m	O	Jordan Valley	2	30S	46E	4390
16H5	N	Laurel Draw	20	45N	53E	6700
17G6a	O	Lookout Butte	2	40S	47E	5650
17G4a	O	Louse Canyon	27	40S	44E	6440
17H2	N	Lower Buckskin	25	45N	39E	6700
16H1M	N	Lower Jack Creek	18	42N	53E	6800
17H3	N	Martin Creek	18	44N	40E	6700
16H3	N	Midas	18	39N	46E	7200
16G7M	I	Mud Flat	34	9S	2W	5500
17G5a	O	Oregon Canyon	9	40S	40E	6950
17H6a	N	Quinn Ridge	9	47N	41E	6300
16G11a	I	Red Canyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR AND	LONG.	
16F3A	I	Silver City	6	5S	3W	6400
18G1MA	O	Silvies	35	32S	33E	6900
16G1	I	South Mountain	35	7S	5W	6340
16F6a	I	Succor Creek	25	3S	5W	6100
15H9M	N	Taylor Canyon	35	39N	53E	6200
15H8	N	Tremewan Ranch	9	39N	53E	5700
16G4AM	I	Triangle	N 1/2 25	7S	3W	5150
18G5a	O	Trout Creek	10	41S	38E	7800
17H1	N	Upper Buckskin	11	45N	39E	7200
16H2	N	Upper Jack Creek	9	42N	53E	7250
18G7a	O	"V" Lake	31	35 1/2 S	32 3/4 E	6600

PAYETTE RIVER

15E2	I	Big Creek Summit	24	15N	5E	6608
16F2M	I	Bogus Basin	16	5N	3E	6120
15E3	I	Cozy Cove	19	11N	7E	5900
15E3	I	Crawford Ranger Station	21	14N	4E	4800
15E10	I	Deadwood Airstrip	8	11N	7E	5440
15E7	I	Deadwood River Dam	8	11N	7E	5290
15E4A	I	Deadwood Summit	23	14N	7E	7000
16E7a	I	Greenfield Flat	1	13N	2E	7370
16E4	I	High Valley Summit	9	10N	2E	5170
15E1	I	Lake Fork	3	18N	4E	6000
16E1	I	Rock Flat Summit	1	18N	2E	5200
15E5A	I	Silver Creek Ridge	24	12N	5E	5700
15D2A	I	Squaw Meadow	5	21N	4E	5800
16E3	I	Tripod Summit	17	11N	3E	5200

WEISER RIVER

16D1	I	Boulder Creek	15	20N	1W	5500
16E6a	I	Mica Ridge	15	15N	2E	6800
16E5a	I	Squaw Flat	32	17N	2E	6230
16E2	I	Placer Creek	15 & 16	17N	3W	6000

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
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10J7 m	SOIL MOISTURE STATION ONLY.
10J7 a	AERIAL MARKER ONLY.
10J7 p	STORAGE PRECIPITATION GAGE ONLY.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (inches)	WATER CONTENT (inches)	WATER CONTENT (inches)	
						LAST YEAR	AVERAGE ^b

BRUNEAU RIVER

Bear Creek (A)	15H1	7800	2/1	55	21.1	11.2	11.7*
Hummingbird Spgs. (A)	15H15	8945	2/1	90	27.3	13.3	10.7*
Pole Creek Rgr. Sta.	15H14	8330	1/26	54	16.4	13.3	10.5*
#Seventy-six Creek(A)	15H3	7100	2/1	27	8.1	6.8	7.4*

OWYHEE RIVER

Antelope Ridge	16G6	5900	1/26	19	3.8	9.7	--
Battle Creek (A)	16G9	5700	2/1	6	2.4	5.7	--
#Bear Creek (A)	15H1	7800	2/1	55	21.1	11.2	11.7*
Bull Basin (A)	16G10	5600	2/1	0	0.0	2.4	--
Hyde Pasture	16G5	5800	2/1	12	4.8	7.8	--
Mud Flat	16G7	5500	1/26	22	4.6	7.0	--
Red Canyon (A)	16G11	6650	2/1	15	6.0	7.3	--
#Seventy-six Creek(A)	15H3	7100	2/1	27	8.1	6.8	7.4*
Silver City (A)	16F3	6400	2/1	46	18.4	11.8	9.7*
Silver City	16F3	6400	1/21	36	11.7	--	--
South Mountain	16G1	6340	2/2	31	12.4	10.2	7.4
Succor Creek (A)	16F6	6100	2/1	15	6.0	6.5	--
Triangle (A)	16G4	5150	2/1	2	0.8	2.2	--

(b) 1948-62, 15 year period. * Not located directly on this drainage. * Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

APPENDIX

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

(b) 1948-62, 15 year period. # Not located directly on this drainage. * Estimated 1948-62, 15 year Average. (A) Aerial observation; Water content estimated.

Agencies Assisting with Snow Surveys, etc.

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests, and
Water Resources, British Columbia
Department of Resources and Development,
Water Resources Division

States:

Idaho State Reclamation Engineer
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service
Agricultural Research Service

U. S. Department of Commerce
Weather Bureau

U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Geological Survey
Indian Service
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Boise Project Board of Control
Little Wood River Irrigation District
Jordan Valley Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Twin Lakes Irrigation Company
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control

PRIVATE CORPORATIONS

Amalgamated Sugar Company

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
P.O. BOX 38
BOISE, IDAHO 83701

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